

A Quarterly Newsletter Of



www.townofnorthandover.com/recycle

recycle@townofnorthandover.com

Winter 2009



Tina Talks Energy!



By Tina Klein, NASWAC Chair

When it comes to climate change and renewable energy, the problems seem so overwhelming that it's hard to know where to start to solve them. You could start the same place that we did—at the hardware store with the purchase of a clothesline.

In my household of two adults and two cats, we cut our energy costs by over one-third. Since 2004, we've reduced our natural gas usage by 49% and our

electric usage by 34%. As a result, our total energy bill has gone down by 33% despite energy price increases, the addition of central air conditioning for one-third of the house, and the addition of a 15% voluntary surcharge for buying 100% of our electricity from renewable resources (see box for more information on the Clean Energy Choice program). Our total energy costs would be down by 37% without the surcharge.

This translates into an annual savings of \$1,153 (it would be \$1,306 if we dropped the "green-up" surcharge). Equally important to us, though, is the fact that we've reduced our carbon footprint by 12,360 pounds per year. That's 5.6 metric tons, or the equivalent of taking one car off the road!

These savings have been accomplished with several changes around our house. Here's how we did it:

- Compact fluorescent lamps (CFLs) are far more energy efficient than their incandescent cousins. In fact, CFLs use 75% less energy and last 10 times longer! We have a lot of lighting in our house and have changed out 26 of the 68 regular light bulbs for CFLs, focusing on the ones that get the most use.
- We went back to hanging our laundry outside to dry in good weather. There was no clothesline at our house, so in 2006 we bought an umbrella-type clothesline at Lowe's. It's a lot lighter than the one my mother had, so it's a snap to put up and take down. We still use the electric dryer in the winter

and during inclement weather, although we're planning to install a clothesline in the basement.

- Also in 2006, we had a high-efficiency fireplace insert installed in our wood-burning fireplace. Now, the heat from the fire is circulated out into the room instead of going up the chimney. We don't often keep it going during the week, but on fall and winter weekends, it allows us to keep the main living space quite comfortable with very little demand on the furnace. We have a mostly wooded lot, so we have a considerable supply of free firewood.
- We replaced our 40-year-old gas furnace with a new ultra-

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Clean Energy Choice

In North Andover, we can choose to participate in National Grid's GreenUpSM, a program that enables you to support the development of renewable energy through your electric bill. For an added cost of approximately \$5 to \$12 per month, you can support the development of new renewable energy resources. In addition, when you sign up, you help earn matching grants for the town and matching funds for low-income renewable energy projects. You may also qualify for a federal tax deduction. For more information, visit www.masstech.org/CleanEnergyOrg.

What's that doing in the trash?

North Andover schools want to do their part, too. It may seem that much of our attention is on residential recycling, but under the leadership of Solid Waste Committee member Lisa Conti, we now have a "recycling liaison" for each school. This group of enthusiastic parents meets as needed to share lots of good ideas.

In celebration of America Recycles Day on November 15, Lisa organized the first waste audit of a school (Sargent) with help from Principal Beth Kline, Recycling Liaisons Bonnie Wolstromer and Cindy Custer, and Custodians Pat Queenan and Anne Brushnell.

Ever hear of a waste audit? Well, it is when all the trash from one day is saved and then sorted into piles of recyclable material and trash. This audit looked at trash from all the classrooms. No cafeteria or bathroom trash was included. All the trash was weighed after it was sorted and the weights were recorded. We found that over 40% of the material in the trash was recyclable, mostly recyclable paper



of various types. Each classroom has a recycling bin, and all classrooms are recycling, but we learned from the trash audit that we can do more! (See box below for details on the amount of paper the town as a whole is burning instead of recycling.)

We hope to complete an audit in each school this winter, with the help of the recycling liaisons from each school, and then to repeat the process in late spring and publish the results.

If you want to see more pictures from the waste audits we have done to date, visit the recycling webpage, www.townofnorthandover.com/recycle, and click on the School Recycling Resource Section.

4. The difference between what paper we could have recycled, 2,744 tons, and what we did recycle, 1,508 tons, is 1,236 tons.
5. At \$70 per ton, it cost \$86,510 to incinerate that extra 1,236 tons of recyclable paper.

How many more pounds of paper would each household have to recycle per week to account for all the paper still left in the trash? Send your answer to recycle@townofnorthandover.com, as well as your suggestions for capturing that paper for recycling, and we'll post your answers and ideas at our website.

Our recycling drop-off location has moved!

The new North Andover Recycling Drop-Off Facility, located at 210 Holt Road, will open on or before January 15, but at deadline the exact date had not been finalized. The new hours are Monday through Friday, 6 a.m. to 6 p.m., and Saturday, 8 a.m. to 2 p.m. The facility is closed on Sunday. These are the materials that will be accepted during all open hours:

- **Household Recyclables:** Recyclables that are accepted in your curbside bins and carts can also be dropped off at the Recycling Center. You no longer need to sort your recyclables at the Center. These materials are accepted: all paper and cardboard (except tissue paper and paper with food waste on it); all plastic food and beverage containers marked with the chasing-arrows recycling symbol and numbers 1 through 7 (no Styrofoam products and no plastic bags); all glass bottles and jars, any color; steel/tin can food containers (no aerosol cans; other metal goes to the scrap metal area—see below); and aluminum beverage cans, clean pie plates, and foil.
- **Clothing:** The Planet Aid collection boxes for clothing are now located at the new facility.
- **Books:** The GotBooks container for books is now located at the new facility.
- **Appliances:** Those which do not contain refrigerant, such as clothes dryers or stoves, can be dropped off free of charge. Fees for refrigerant-containing appliances, such as



The recycling bins are located just over the waist-high walls. Each bay is clearly marked to help you recycle right!

air conditioners, refrigerators, etc., remain the same.

- **Furniture:** *This is new!* There will be a large enclosed container for *reusable* furniture. Please, no junk! TBI has the right to refuse any items. All items will be donated to a local charity.
- **Tires:** *This is also new!* There will be a container specifically for collecting tires.
- **Scrap Metal:** Scrap metals, such as broken bicycles and old swing sets, are accepted. The dumpster will be clearly marked.
- **Other Items:** Fluorescent light bulbs and ballasts, mercury-containing devices, paint, computers, TVs, electronics, propane tanks, and car batteries will be accepted whenever the Recycling Center is open. (These items were previously only accepted during our 3rd Saturday collections.) Fees will remain the same. Refer to the website, www.townofnorthandover.com/recycle, for details.

Used motor oil will *not* be accepted at the new facility. Used motor oil recycling will still be offered at the DPW on the first and third Saturdays of the month.

We can do better!

Here's what we know:

1. The Town of North Andover disposed of a total of 6,209 tons of trash during the first nine months of 2008.
2. We recycled 1,885 tons over the same period: 1,508 tons of paper and 377 tons of plastic, metal, and glass.
3. According to the U.S. EPA, 33.9% of the waste stream (trash and recycling combined) is recyclable paper, which would have been 2,744 tons for this period in North Andover.

10 tips FORA BETTER New Year

It's the time of year when we're thinking about making things better—ourselves, our families, our homes, and our budgets. As you're making your resolutions, consider these 10 tips:

1. Before you buy, ask yourself these questions: Do I need this? Do I already have something like this? Do I need something new right now? Does it have too much packaging? What will I do with this when I no longer need it?
2. Stop making "wish lists." Whether you make them online, write them on a scrap of paper, or keep them in your head, wish lists keep you thinking about what you want but don't yet have.



(c) Louoates/SnapVillage.com

3. Start your exercise, weight-loss, or other self-improvement program on borrowed or shared equipment. If you stick with the program or hobby, you can purchase your own supplies and equipment later, if you need them.
4. Precycle. You do this by shopping for groceries and other products with recycling in mind. Know what you can recycle and choose products packaged in those materials. Better yet, try to buy items with no packaging whenever possible. For example, if you need a bunch of bananas or two apples, you don't need a plastic produce bag.
5. Commit to recycled-content products. Successful recycling programs depend on having manufacturers use your recyclables. If you need a new fleece vest or jacket, look for fleece made from recycled soft drink bottles. Did the dog ruin your carpet? Select recycled-content carpet.
6. Take an inventory at home. Do you have supplies for a hobby that you never started? Now would be a good time to begin. Do you have books on



(c) Monkey Business Images/SnapVillage.com

your shelf that you haven't read? Don't buy a new book—read one you already own. The same goes for movies—have you watched all of the DVDs you have at home? If not, start now.

7. Find your library card. The library is a great resource for no-cost entertainment. Look for books, magazines, CDs, movies, and more.

8. Scan your pantry shelves for food that your family won't eat. We all have canned and boxed goods that we purchased but never got around to using. Check the "use by" or "best by" dates and donate unexpired items to a local food pantry or other non-profit organization.

9. Give more of your time and talent. If you are feeling that you can't afford to donate as much money to your favorite causes, commit more of your time and energy.
10. Start thinking now about planting a garden this year. A garden can be a relaxing hobby and also a good source of food for your family. Even if you just have a small patio, consider planting tomatoes or peppers, which can grow in a pot.

For more information, visit www.newdream.org/marketplace/economy.php for The Center for a New American Dream's "Economy Survival Guide: Give Your Life a Make-Under," or call 877-68-DREAM.



Every dollar I spend is a statement about the kind of world I want and the quality of life I value.

New American Dream
www.newdream.org

“Junk” highlights plastic problem in oceans

Last summer, Dr. Marcus Eriksen and Joel Paschal set sail from Long Beach, California and headed for Honolulu, Hawaii. However, they weren't traveling on a traditional and comfortable craft. Instead, they were aboard a raft floating on pontoons made from 15,000 plastic water bottles, sitting atop a deck made from salvaged sailboat masts, and enjoying only the shelter of an old Cessna private plane's body. The raft had four sails and was able to travel about 50 miles each day. The 2,600 mile journey took nearly three months.

The raft was made from junk and christened “Junk” to shed light on an urgent marine problem—the accumulation of plastic debris, especially bottles and bags, in our oceans. Plastic debris in the oceans can harm aquatic life, choking birds, killing plankton, and releasing toxins into the water. In an area north of Hawaii, known as the North Pacific Gyre, a large whirlpool of plastic trash spins. The area is home to more plastic, by weight, than plankton, which are small drifting organisms that form the bottom of the marine food chain.

Thanks to modern technology, the mariners were able to stay on course and in touch with Anna Cummins, who provided ground support. During the voyage, they took video and blogged their journey, posting the results regularly on the Internet.

To learn more about making the Junk raft and the trip across the eastern Pacific, visit www.junkraft.blogspot.com or <http://junkraft.com>. To watch video about the voyage, go to www.YouTube.com and search for “junk raft.”



Photos courtesy of YachtPals.com

QUOTES REQUOTED

Use it up,
wear it out,
make it do, or
do without.

Early American Saying

Source: U.S. National Archives and Records Administration



Green your brain!

Are you looking for some indoor fun? Test your “green score” by playing the interactive trivia game at www.greenmybrain.com. Each question addresses an environmental problem, a solution, or an action that you can take. Answers are multiple choice. There are two levels, with level two questions being more challenging.

Even at level one, you’ll find some tricky questions, such as: “Between 1980 and 1999, the Environmental Protection Agency’s regulations on lead usage reduced lead emissions by what percent?” (The answer is 95%!) Other questions may cover more familiar territory, like this one: “Instead of buying containers for leftovers at the store, you can....” (We’ll let you figure that one out yourself!)

Whether you are a novice or an expert, you’ll have fun playing this game and will learn a lot along the way.

Players can even submit questions. Of course, the game masters do thorough fact-checking before posting submitted questions and answers.



Paper, paper everywhere

Each year, we preserve only 10% of the paper that we receive and handle. This preserved paper includes books, magazines, photographs, and filed documents. The rest of the paper is recycled or disposed. As much as 81% of this paper could be recycled, while the remainder is destroyed during use or contaminated, such as tissues. However, at present, 56% of paper is being recycled, which means we can do better.

Our paper recycling in the U.S. affects the supply of recyclable paper around the globe. America has been referred to as “the Saudi Arabia of recovered paper.” On average, Americans recycle 360 pounds of paper and paper products (such as corrugated cardboard) each year. In 2007, 54.3 million tons of paper were recovered for recycling in the U.S. This paper becomes the feedstock for paper recycling mills around the world. Just as the Middle East provides much of the

world with oil, the U.S. supplies much of the world with recyclable paper.

In a time when U.S. paper consumption has leveled off, paper consumption around the world is increasing rapidly. At present, worldwide consumption is about 440 million tons per year. However, by 2015, that number may be as high as 550 million tons, with the largest growth in China and India, the

world’s most populous nations. If the U.S. were to recycle all of the paper that is currently recyclable, we could meet nearly one-quarter of that additional demand, supplying about 25 million tons more paper to the recovery system.

But what about the non-recyclable paper—those papers that are destroyed or contaminated during use? The best option is to purchase 100% recycled-content alternatives. For instance, if every household in the U.S. purchased a single roll of 100% recycled-content toilet paper, we could save 330,000 trees.

To learn more about paper manufacturing, use, and recycling, go to INFORM’s Secret Life Series at www.secret-life.org/paper/. You’ll find a helpful video, as well as a great deal of useful information.

For more information about paper recycling, visit www.paperrecycles.org or contact our office.



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What is the Forest Stewardship Council?

The Forest Stewardship Council (FSC) is an independent, international organization which certifies forests and forest-based products. The FSC standards focus on environmentally responsible, socially beneficial, and economically viable forestry management practices. The goal of the FSC is forests that conserve biological diversity, minimize logging-related pollution, improve the lives of forest workers and surrounding communities, and encourage long-term health and usefulness of the forest stock.

However, FSC certification doesn’t stop at the edge of the forest. Through a rigorous, chain of custody certification program, FSC follows the tree to sawmill, manufacturing plant, and distribution center. When a paper or building product bears the FSC logo, you’ll know that the trees used to make the product were harvested in the most sustainable way possible.

In 2008, 254 million acres of forest worldwide, representing about 7% of all forests, had received FSC certification. More than 10,000 products are FSC certified. When you shop for building products, paper, and paper products, look for the FSC logo.

For more information, visit www.fscus.org.

Forty Years Later...

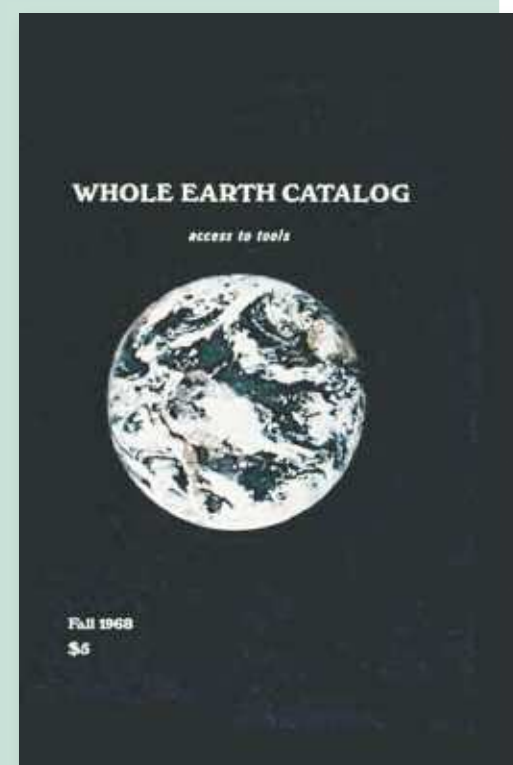
In the fall of 1968, Stewart Brand and friends published a catalog that became a sensation. The *Whole Earth Catalog*, which was only published regularly through 1972 and then periodically thereafter, is where the weekend do-it-yourselfer crossed paths with the back-to-land enthusiast.

The goal of the catalog was to provide “access to tools.” Some of these tools were products, but others were ideas, including books, journals, magazines, maps, and classes. This wasn’t a mail-order catalog, but rather, a resource on systems and technologies, companies, and products. Members of the Whole Earth team sought out and evaluated tools and ideas, providing helpful reviews for the readers. To be listed, an item had to meet several criteria, including that it was: useful as a tool; relevant to independent education; high-quality or low-cost; not already commonly known; and easily available by mail. For example, the first catalog had features on the magazine *Scientific American*, the outdoor outfitter L.L. Bean, and a Hewlett-Packard tabletop calculator.

According to Apple founder Steve Jobs, the *Whole Earth Catalog* was the forerunner of the Internet. First, the catalog actively promoted emerging technologies. Second, it encouraged thinking in terms of “systems.” And, third, it relied heavily on the collaboration of its contributors, including “user-generated content.” In other words, the *Whole Earth Catalog* was a search engine, like Google, and a blog — long before those two existed.

In 1972, the *Whole Earth Catalog* won a National Book Award for the serialized publication of Gurney Norman’s novel, *Divine Right’s Trip*. This was the only National Book Award ever given to a catalog.

If you don’t remember the *Whole Earth Catalog*, visit www.wholeearth.com, where you can see old editions online or read some of the articles.





Multi-Family Recycling: So far, two multi-family residential complexes have begun recycling. We want to encourage other complexes to do so, as well. We can now offer recycling collection services to these complexes free of charge. Property managers or condo associations will be responsible for providing the collection containers, which may vary from wheeled carts to large dumpsters, depending on the number of units on site.

The Recycling Committee is available to help you and your property manager or condo association work out the details. We can provide educational materials for residents or make a presentation at a condo association meeting—whatever it takes. Contact NASWAC member Judy Walker at (978) 682-4328 to get started.



Recycle those holiday trees! After you remove all the lights, decorations, and tinsel from your family's cut holiday tree, give it another life with recycling. The tree must be loose—do not place the tree into an extra-large tree bag. Place the bare and unbagged tree at the curb. It will be picked up on your regular trash day between January 5 and January 16. Don't forget to remove the stand.

Thanks to our hard-working volunteers!

NASWAC Committee Members

- Tina Klein, Chair
- Steve Daly, Vice Chair
- Keith Alter
- Norm Bagley
- Lisa Conti
- Philip DeCologero
- Karen Kline
- Martha Mittelstaedt

Associate Members

- Pete Murley
- Steve Parkes
- Susan Seaquist-Almona
- Judy Walker

Ex-officio Members

- Bruce Thibodeau, DPW Director
- Mark Caggiano, Selectman

We want your suggestions, questions and comments!

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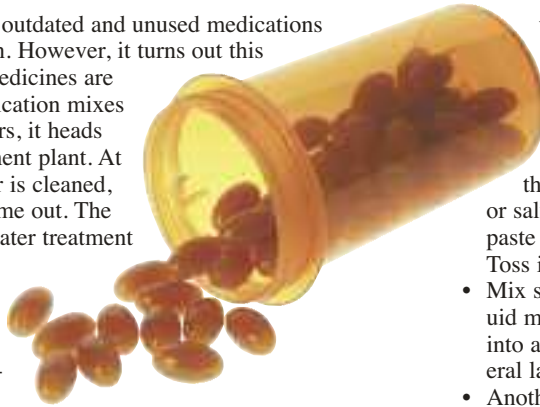
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Please recycle this publication after you have read it!

Why not down the drain?

In the past, people believed that outdated and unused medications should be poured down the drain. However, it turns out this isn't a good idea at all! When medicines are poured down the drain, the medication mixes with wastewater. From the sewers, it heads straight to the wastewater treatment plant. At this plant, even though the water is cleaned, some of the medicines won't come out. The cleansed water from our wastewater treatment plant goes into the Merrimack River. Our drinking water is a separate system that is in no way impacted by the wastewater system. However, medications that reach the Merrimack River may have an impact on other towns downstream that do draw their drinking water from the Merrimack. Not only that, but medications



which reach the rivers can negatively impact fish populations.

A preferable option is to dispose of unneeded medication in your trash. To dispose of medicines safely in the trash, follow these guidelines:

- Make the medication unusable and unattractive to children, animals, or scavengers. Crush or break pills and mix them with a liquid to create a paste. Adding dirt from the yard or salt to this mixture will make it even more unattractive. Put this paste back into a child-proof container and seal it with duct tape. Toss it into the trash.
- Mix salt, dirt, or ashes from the fireplace or barbeque pit with liquid medications. Be sure that the liquid medication has also turned into a thick paste. Again, seal the container with duct tape or several layers of masking tape.
- Another option is to mix old medication with used kitty litter or coffee grounds and put the mixture into a nondescript container, such as an empty can or sealable bag.

Take a look at your waste

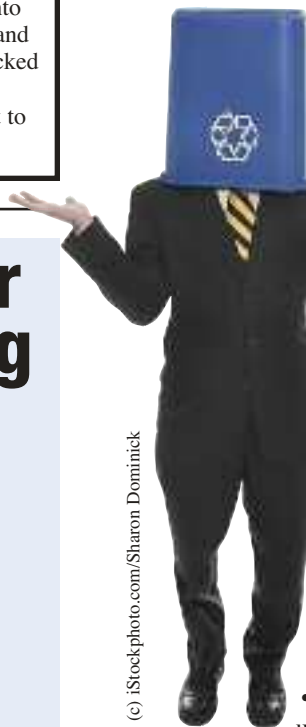
Schools aren't the only places that benefit from waste audits. Whether you run a manufacturing plant, a retail store, or an office, how your operation uses, wastes, and disposes of materials affects your bottom line. However, before you can buy smarter, use less, recycle more, or dispose of fewer hazardous materials, you need to know what you're doing now.

A waste audit will help you understand what materials are

used and which, if any, are being needlessly wasted. To begin a waste audit, ask these questions:

- What do we purchase on a regular basis? How are these items packaged and shipped?
- What do we have stored? What items have been stored for a long period of time? Could we reorganize our inventories to use up what we already have?
- What disposables are we using? How many of these could be replaced by reusables or refillables?
- What are we spending on waste handling and disposal?
- What hazardous materials are we using and disposing? Could we replace some of these materials with less hazardous alternatives?
- What processes create a great deal of waste? Do these processes seem wasteful? Could they be modified to create less waste?
- At the end of the day or the week, what is in our trash cans or dumpsters? Are we placing potentially recyclable resources in the trash?
- What variety and quantity of recyclables are available? How could we collect and recycle these materials?
- Are current waste reduction and recycling efforts working? If so, could they be expanded? If not, how could they be modified?
- What suggestions do our employees have to use resources more efficiently, reduce waste, and increase recycling?

If you would like guidance on performing a waste audit or need confidential assistance, please email recycle@townofnorthandover.com. We are available to help, and our services are offered at no charge to your business or organization.



(c) iStockphoto.com/Sharon Dominick

Tina Talks Energy

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high-efficiency model. It is rated at 95% efficiency, a considerable improvement over the estimated 60% efficiency of our old model. We received a \$1,000 energy savings rebate from our gas utility due to the high-efficiency rating.

- We replaced our 20-year-old traditional gas hot water heater with a tankless, on-demand hot water heater. We're no longer keeping 60 gallons of water at 120° while we're at work or asleep. Our on-demand system makes hot water only when we actually need it—and for as long as we need it—so there is no running out of hot water halfway through a shower. The tankless water heater also qualified for a \$300 rebate.
- This summer we replaced our refrigerator, which was more than 15 years old, with an Energy Star-rated fridge. The new refrigerator is actually larger than the old one because we wanted a French door model with a bottom freezer, but it only uses about one-third the electricity of the old one.

When we replaced the furnace and hot water heater, we had hoped to go solar for at least the hot water, and possibly part of the heat. Unfortunately, those same trees that give us free firewood and help keep our house cooler in the summer mean that we don't get enough sun on our roof to make solar feasible with the technology that is available at a reasonable price point today.

We still have plenty of room for improvement. This year we're replacing some insulation that has been compromised in a crawlspace. We would like to get an infrared photo done of our house during heating season to see where the biggest heat losses are occurring, but we have a few guesses. For instance, our windows are older, single-glazed windows with outside storm windows, so high-efficiency replacement windows might be a future project.

Whether your motivation is reducing your carbon footprint, helping the U.S. achieve energy independence, or saving money, there are plenty of places to get started.

